ABSTRACT OF THE DISCLOSURE

The present invention provides a simulation method for an apparatus which produces refrigeration effect by means of heat exchange between refrigerant and air, wherein the simulation method provides good expandability to allow new parts to be added and so on. The method includes the steps of: classifying models which represent phenomena occurring in various components of an apparatus for producing refrigeration effect by means of heat exchange between refrigerant and air into categories independent of one another; defining the resulting categories as classes; defining an abstract class by extracting characteristics common to a plurality of similar parts contained in each category if these parts need to be distinguished for the purpose of calculation; providing, under the abstract class, as many subclasses which inherit character of the abstract class as there are necessary types of part; implementing a phenomenological model of each defined class; and creating a simulation program in an object-oriented language based on the classes.